

Mr. Michael Cook, Director  
Office of Superfund Remediation  
and Technology Innovation  
U.S. Environmental Protection Agency  
M.S. 5210G  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

SUBJECT: NOTIFICATION OF THE DECOMMISSIONING OF THE KAISER ALUMINUM  
SPECIALTY PRODUCTS SITE

Dear Mr. Cook:

This letter is intended to notify you of the decommissioning oversight actions that the U.S. Nuclear Regulatory Commission (NRC) has taken and intends to take for the Kaiser Aluminum Specialty Products site located in Tulsa, Oklahoma.

On October 9, 2002, the NRC and the U.S. Environmental Protection Agency (EPA) entered into a Memorandum of Understanding (MOU) on "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." The MOU provides that, unless an NRC-licensed site exceeds any of three trigger criteria contained in the MOU, EPA agrees to a policy of deferral to NRC decision-making on decommissioning without the need for consultation.

For sites that trigger the criteria in the MOU, NRC will consult with EPA at two points in the decommissioning process: (1) prior to NRC's approval of the license termination plan (LTP) or decommissioning plan (DP), which NRC terms Level 1 consultation; and (2) following completion of the Final Status Survey (FSS), which NRC terms Level 2 consultation. Although the NRC's plan for consulting with EPA calls for the initial Level 1 consultation to occur early in the decommissioning process, at the time the MOU was signed NRC had several sites which were in the latter stages of the LTP/DP process. Since these sites were further along in the decommissioning process, the next opportunity to consult with EPA would be a Level 2 consultation following the completion of the FSS.

This letter is to notify you of the existence of one of these sites. This letter is not considered a Level 1 consultation because this site already has an approved decommissioning plan. However, the NRC believes it is in the spirit of the MOU to notify the EPA of sites which could possibly require a Level 2 consultation in the future, and were already well into the decommissioning process at the time the MOU was signed.

### The Kaiser Aluminum Site

The Kaiser Aluminum site, owned by Kaiser Aluminum and Chemical Corporation and located in Tulsa, Oklahoma, was licensed beginning in March 1958 to perform smelting of magnesium alloy (containing up to 4% thorium) for the production of anodes. The NRC license was terminated in 1971 at the request of the licensee. NRC added the Kaiser Aluminum site to the Site Decommissioning Management Plan (SDMP) in 1994. The site is currently in the 2<sup>nd</sup> phase of a two-phase remediation, in accordance with a DP approved by the NRC in June 2003. (The DP for Phase I was approved by the NRC in April 2000). The site consists of approximately 24 acres, and approximately 14 acres were affected with elevated radionuclide concentrations. The approved DP for the 2<sup>nd</sup> phase contains derived concentration guideline levels (DCGLs) for 2 radionuclides that exceed the MOU trigger values for soil (i.e., radium-226 and thorium-232). Remediation work under Phase 1 was completed in March 2002. Remediation work under Phase 2 is expected to be completed in 2006.

Since the Kaiser site is not currently licensed, no license termination action will occur when Phase 2 remediation work is completed. When site remediation is completed, the NRC will verify through a review of Kaiser Aluminum's FSS and NRC's own confirmatory survey data that the site has achieved the required cleanup levels. Because the Kaiser site is not licensed, Kaiser Aluminum was not obligated to meet the criteria of the License Termination Rule (LTR) in 10 CFR 20 Subpart E. However, Kaiser Aluminum agreed to clean up in accordance with the concentration-based criteria in NRC's 1992 SDMP Action Plan (57 FR 13389), rather than the dose-based LTR criteria. The SDMP Action plan criteria being used at this site are fully protective of the public health and safety, and the environment. The criteria in the SDMP Action Plan are reasonably consistent with the dose criteria in the LTR. Specifically, the contamination levels permissible under the SDMP Action Plan are within the range of measurable values that could be derived through the site-specific screening and modeling approaches defined in the guidance supporting the LTR.

In addition, NRC notes that in its experience sites are often remediated well below the cleanup levels because of the nature of the cleanup process. For this reason, NRC does not expect the site will require a Level 2 consultation, because the levels of residual radioactivity remaining after remediation are anticipated to be lower than the MOU trigger values. However, if the residual radioactive material concentration levels in soil measured in the FSS still exceed the MOU trigger values, NRC will enter into Level 2 consultation with EPA in accordance with the MOU.

As part of the DP review and approval process, the NRC staff prepared, and issued for public comment, environmental assessments (EAs) to document how the remediation at the Kaiser Aluminum site would ensure protection of the public health and safety, and the environment. The EA for phase 1<sup>1</sup> was published in the Federal Register on March 8, 2000, at 65 FR 12283, and the EA for phase 2<sup>1</sup> was published in the Federal Register on June 9, 2003, at 68 FR 34422. The EAs conclude that approval of the DP would not result in any significant impacts on the human environment and is protective of human health. In addition, the approval of the

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<sup>1</sup> The EAs are available in NRC's electronic reading room at <http://www.nrc.gov/reading-rm.html> (ML003682313 and ML031530133).

Phase 2 DP was based on the NRC staff's Safety Evaluation Report (SER) issued on June 8, 2003.<sup>2</sup> The SER concluded that the activities described in the DP were consistent with the Commission's regulations and that approval of the DP would not be inimical to the common defense and security, or to the health and safety of the public.

Next Steps

Following site remediation activities at the Kaiser Aluminum site, NRC staff will review information contained in the FSS Report and compare the remaining levels of residual radioactivity to the MOU trigger levels. If the FSS measurements trigger the MOU, an additional consultation between the agencies will occur under the MOU to identify and resolve any remaining issues. In the meantime, if you have any questions regarding this letter or the remediation activities at the Kaiser Aluminum site, please contact Mr. John Greeves, Director of the Division of Waste Management and Environmental Protection, at 301-415-7437.

Sincerely,

Jack R. Strosnider, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosure: Proposed Remediation Values at the Kaiser Aluminum Site

cc: Kaiser Service List

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<sup>2</sup> The SER is available in NRC's electronic reading room (ML031620343).

**PROPOSED REMEDIATION VALUES  
AT THE KAISER ALUMINUM SITE**

Radionuclide	DCGL (soil)*	MOU (soil)*
Pb-210	1.751	15 (with daughters)
Ra-226	5.9	5
Ra-228	4.3	---
Th-228	3.4	15 (with daughters)
Th-230	102	---
Th-232	31.1	5

\*soil values reported in pCi/g

Enclosure